

TO THE EDITOR, *Genitourinary Medicine*

# **Finger nails as a reservoir for *Candida albicans* in recurrence of vaginal candidosis**

Sir,  
Recurrent vaginal infections with *Candida albicans* remain a substantial clinical problem. Many explanations have been given for recurrence, including reinfection from an intestinal reservoir<sup>1-3</sup> or a sexual partner,<sup>3,4</sup> and hypersensitivity or other abnormalities of the local immune response to *C. albicans*.<sup>5-6</sup>

As pruritus is a major symptom of Candidal vulvovaginitis, there has always been a conjectural possibility that the patient's finger nails, used to scratch the affected vulva, may act as a temporary reservoir of *C. albicans* for reinfection. We recently obtained evidence of this route of reinfection in one patient in the course of a larger investigation, in which isolates of *C. albicans* from multiple anatomical sites were identified by standard methods<sup>7</sup> and *C. albicans* isolates were biotyped.<sup>8,9</sup>

The patient, a woman aged 40, first presented at the genitourinary medicine clinic of Leicester Royal Infirmary with signs and symptoms of vulvovaginal thrush. She had received a course of antibiotics two weeks previously and a course of metronidazole one week previously. Single swabs were taken from the vagina, urethra, anus, mouth, and finger nails (in the latter case one swab was rubbed sequentially beneath all ten nails), and were plated on Sabouraud dextrose agar (Oxoid). All the samples were positive for yeasts, with confluent growth obtained from the vaginal and urethral swabs and a single colony from the oral and nail swabs. The isolate from the finger nails was identified as *Trichosporon cutaneum*. Those from the other sites were all identified as *C. albicans* biotype 117.

The patient was given a single 500 mg clotrimazole pessary and clotrimazole cream to be applied to the vulva daily. She returned for follow up seven days after the initial examination. On this occasion no yeasts were isolated from oral, anal, urethral, or vaginal swabs and the patient was free of symptoms. The swab from the finger nails, however, yielded three colonies of *C. albicans* biotype 117. The patient was given a further seven day course of topical vaginal antifungal treatment. Two weeks later she returned to the clinic complaining of a recurrence of her symptoms of thrush. On this occasion the vaginal swab only was positive for yeasts — once again *C. albicans* biotype 117 was isolated.

The pattern of transmission of the *C. albicans* in this case seems to be clear, as in the period between recurrences only the finger nails were positive for *C. albicans* and the biotype isolated from the finger nails had evidently replaced the previous yeast flora. The extra information given by the biotyping tests confirms that the recurrence was caused by the same strain of *C. albicans* as before.

It should be pointed out that evidence of the type of transmission documented here is obtained only rarely even when a prospective survey of multiple sites for *C. albicans* is undertaken, as it requires, among other things, reattendance of the patient at the clinic at the appropriate sample times, which is not always a matter within the control of the clinic. The overall carriage rate of yeasts under the finger nails of women in our larger survey (to be published elsewhere) is about 11%, with *C. albicans* implicated in about a quarter of patients yielding yeasts. This carriage rate suggests that finger nail reservoirs of *C. albicans* for vaginal reinfection occur rarely, but consideration of this possible route of reinfection may sometimes be useful in cases refractory to genital antifungal treatment.

Yours faithfully,

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## **References**

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TO THE EDITOR, *Genitourinary Medicine*

# **Cytomegalovirus infection in provincial homosexual men**

Sir,  
In a recent study conducted at a London sexually transmitted diseases (STD) clinic, serological evidence of cytomegalovirus (CMV) infection was found in almost all homosexual men tested.<sup>1</sup> Other viral STD, such as hepatitis B, have a lower prevalence in provincial homosexual men attending STD clinics than are reported from London.<sup>2</sup>

We studied the prevalence of prior CMV infection in 295 consecutive homosexual and bisexual men presenting to the department of genitourinary medicine in Sheffield. Serum was obtained at their presentation and tested for CMV antibodies by three methods: haemagglutination (Cetus Corporation of California), latex agglutination (CMV Scan, Becton & Dickinson), and an enzyme linked immunosorbent assay (ELISA) (CMV Antigen, Institute Virion). Patients were deemed to be seropositive if two or more tests gave positive results.

Two hundred and thirty two (78.6%) men were seropositive, the mean (SD) age of seropositive men was 31.9 (8.6) and mean number of sexual partners in the preceding three months was 2.5 (3.2). These values did not differ appreciably from those found in seronegative men. We found significant correlations between seropositivity and a history of gonorrhoea ( $p=0.05$ ), hepatitis B ( $p=0.05$ ), and genital warts ( $p=0.05$ ), but no correlation with previous syphilis or non-specific genital infection (table).

This prevalence of CMV infection in our clinic population of provincial homosexual men was significantly less than that reported by Mindel and Sutherland, who found 93% of their 152 patients to be seropositive ( $\chi^2=16$ ;  $p<0.001$ ). This lower prevalence may relate to differences between the populations in terms of ethnic background (only seven (2.4%) of our patients were non-white) or sexual behaviour.

CMV infection may cause immune suppression and has been implicated in the acquired immune deficiency syndrome as a cofactor in the development of Kaposi's sarcoma<sup>3</sup> and major opportunistic infections. Geographical differences in the prevalence of

TABLE Prevalence of antibody to cytomegalovirus (CMV) and history of sexually transmitted disease (STD)

History of STD	No (%) with antibody (n=232)	No (%) without antibody (n=63)	$\chi^2_1$	p
Syphilis	29 (13)	4 (6)	1.9	NS
Gonorrhoea	60 (26)	8 (13)	4.8	<0.05
Non-specific urethritis	95 (41)	22 (35)	0.8	NS
Hepatitis B	47 (20)	6 (10)	3.9	0.05
Genital warts	53 (23)	8 (13)	3.5	0.05
Herpes	20 (9)	3 (5)	1	NS

CMV seropositivity in homosexual men might therefore be reflected in the number of patients infected with human T lymphotropic virus type III (HTLV-III) who progress to end stage disease.

Yours faithfully,  
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## References

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## Notices

Organisers of meetings who wish to insert notices should send details to the editor (address on the inside front cover at least eight months before the date of the meeting or six months before the closing date for application).

### Grand Orient de Belgique masonic lodge, Les Amis du Commerce et la Perseverance Reunis, 4th medical prize

In March 1987 the masonic lodge "Les Amis du Commerce et la Perseverance Reunis" in Antwerp will award its 4th medical prize of 30 000 ECU (£19 000).

The purpose of the prize is to reward a scientist or group of scientists who, in the course of their research work, have made a significant contribution to the progress of medical science whether theoretical or practical, fundamental or clinical. The prize may be divided between several candidates.

The prize will be awarded by jury of four members and a president appointed by the masonic lodge "Les Amis du Commerce et la Perseverance Reunis". The jury shall be entitled to call in experts for advice if it deems necessary. The members of the jury who will have been empanelled to attend the meetings will have to justify their judgment of the candidacies in writing. All deliberations will

be made in camera and decisions made by a simple majority. All working expenses will be paid by the organising lodge.

The competition is open to any researcher whether certified or not, without discrimination of a racial, national, sexual, or philosophical nature. Candidacies for the prize must be sponsored by at least two freemasons whose masonic qualifications must be confirmed by their masonic authorities. In turn the sponsors will have to vouch in writing for the moral integrity of their candidates.

All applications must be accompanied by a detailed curriculum vitae of the candidates, a résumé of their scientific activities, and the opinion of the authorities under whom they work. All applications must be submitted before 30 December 1986 and addressed to: Mr René De Zuttere, Hoogpadlaan 101, B-2070 Antwerp, Belgium.

The jury will come to a decision not later than 31 March 1987. This decision will be final and not open to appeal. The prize will be

presented during an academic session in Antwerp in May 1987. The masonic lodge "Les Amis du Commerce et la Perseverance Reunis" reserves the right to withhold the prize should the applications appear to be below standard.

### Eighth international meeting of dermatological research

The eighth meeting devoted to dermatological research will be held under the auspices of the Société de Recherche Dermatologique in Nantes, France on 9 to 11 October 1986. The meeting will be organised by the department of dermatology, Centre Hospitalier Régional de Nantes, Hôtel-Dieu, Nantes, France (Director, Professor H Barrière). Further information, abstract forms, and application forms may be obtained from Dr JF Stalder, CARD Service de Dermatologie, CHU 44035 Nantes, France.